Patent Claims

1. A method for achieving a light or UV screening effect on the skin of a patient, comprising applying to the skin a compound of formula I

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$$R^{2}$$

$$R^{1}$$

$$R^{5}$$

$$R^{5}$$

$$R^{7}$$

$$R^{8}$$

$$R^{9}$$

$$R^{10}$$

$$R^{9}$$

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where R1 and R2 are

- Hor

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- OR¹¹, where each OR¹¹ is independently
 - OH,
 - straight-chain or branched C₁- to C₂₀-alkoxy,
 - straight-chain or branched C₃- to C₂₀-alkenyloxy,
 - straight-chain or branched C₁- to C₂₀-hydroxyalkoxy, where one or more hydroxyl groups is bonded to a primary or secondary carbon atom and alkyl chains of said hydroxyalkoxy moiety optionally being interrupted by

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oxygen, or

- a C_{3} to C_{10} -cycloalkoxy group or C_{3} to C_{12} -cycloalkenyloxy group, having rings optionally bridged by -(CH₂)_n- groups, where n = 1 to 3, or
- mono- and/or oligoglycosyl,

with the proviso that at least one of R1 or R2 is OR11,

- R³ is OR¹¹, and

R⁴ to R⁷ and R¹⁰ are each independently,

- H,

- straight-chain or branched C₁- to C₂₀-alkyl,
- straight-chain or branched C₃- to C₂₀-alkenyl,
- straight-chain or branched C₁- to C₂₀-hydroxyalkyl, where the hydroxyl group is bonded to a primary or secondary carbon atom

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and alkyl chains of said hydroalkyl moieties optionally being interrupted by oxygen, or

- C_{3} - to C_{10} -cycloalkyl groups or C_{3} - to C_{12} -cycloalkenyl groups, having rings optionally bridged by -(CH₂)_n- groups, where n = 1 to 3. and

R8 and R9 are each independently

- . H,
- OR¹¹.
- straight-chain or branched C₁- to C₂₀-alkyl,
- straight-chain or branched C₃- to C₂₀-alkenyl,
- straight-chain or branched C₁- to C₂₀-hydroxyalkyl, where the hydroxyl group is bonded to a primary or secondary carbon atom and alkyl chains of said hydroxyalkyl moieties optionally being interrupted by oxygen, or
- C_{3} to C_{10} -cycloalkyl or C_{3} to C_{12} -cycloalkenyl, having rings optionally bridged by -(CH₂)_n- groups, where n = 1 to 3.
- 2. A method according to Claim 1 wherein R⁴ to R⁷ and R¹⁰ are H.
- 3. A method according to claim 1 wherein R³ is
 - OH or
 - straight-chain or branched C₁- to C₂₀-alkoxy, or
 - mono- and/or oligoglycosyl, and

R¹ or R² are

- OH,
- straight-chain or branched C₁- to C₂₀-alkoxy or
- mono- and/or oligoglycosyl.

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- 4. A method according to claim 1, wherein R³ is methoxy, ethoxy or ethylhexyloxy.
- 5. A method according to claim 1, wherein R¹ or R² is methoxy,ethoxy or ethylhexyloxy.
- 6. A method according to claim 1, wherein R¹ or R² is glucosyl.

7. A method according to claim 1, wherein compound according to claim 1 wherein R^3 is a straight-chain or branched C_1 - to C_{20} -alkoxy group, and R^8 and R^9 are identical and are H or straight-chain or branched C_1 - to C_{20} -alkoxy.

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- 8. A method according to claim 7, wherein R³ is methoxy, ethoxy or ethylhexyloxy.
- 9. A method according to claim 7, wherein R⁸ and R⁹ is methoxy, ethoxy or ethylhexyloxy.
 - 10. A method according to claim 8, wherein R⁸ and R⁹ is methoxy, ethoxy or ethylhexyloxy.
- 11. A method according to claim 1, wherein at least one of R¹ to R³ is OH, and at least one of R¹ and R² is OH.
 - 12. A method according to claim 1, wherein the compound of formula I is applied in the form of a pharmaceutical composition.
- 13. A method according to claim 12, wherein the pharmaceutical composition is in encapsulated form.
 - 14. A method according to claim 12, wherein the pharmaceutical composition further comprises an additional UV filter.
- 15. A method according to claim 14, wherein the additional UV filter is 325 (4'-methylbenzylidene)-dl-camphor, 1-(4-tert-butylphenyl)-3-(4methoxy-phenyl)propane-1, 3-dione, 4-isopropyldibenzoylmethane,
 2-hydroxy-4-methoxybenzophenone, octyl methoxycinnamate, 3,3,5trimethyl-cyclohexyl salicylate, 2-ethylhexyl 4(dimethylamino)benzoate, 2-ethylhexyl 2-cyano-3,3-diphenylacrylate,
 or 2-phenylbenzimidazole-5-sulfonic acid or a potassium, sodium or
 triethanolamine salt thereof.

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- 16. A method according to claim 12, wherein the pharmaceutical composition further comprises at least one antioxidant.
- 17. A method according to claim 12, wherein the pharmaceutical composition comprises a cosmetically or dermatologically suitable excipient.
 - 18. A method according to claim 1, wherein the compound of the formula I is prepared by reacting a 2-hydroxyacetophenone compound with a lithium compound and subsequently a keto compound.
 - A method of stabilizing a UV filter comprising adding thereto a compound of formula I

where R¹ and R² are

- Hor
- OR¹¹, where each OR¹¹ is independently
 - OH
 - straight-chain or branched C₁- to C₂₀-alkoxy,
 - straight-chain or branched C₃- to C₂₀-alkenyloxy,
 - straight-chain or branched C₁- to C₂₀-hydroxyalkoxy, where one or more hydroxyl groups is bonded to a primary or secondary carbon atom and alkyl chains of said hydroxyalkoxy moiety optionally being interrupted by oxygen, or
 - a C_{3} to C_{10} -cycloalkoxy group or C_{3} to C_{12} -cycloalkenyloxy group, having rings optionally bridged by $-(CH_{2})_{n}$ groups, where n = 1 to 3, or

mono- and/or oligoglycosyl,

with the proviso that at least one of R¹ or R² is OR¹¹,

- R³ is OR¹¹, and

R⁴ to R⁷ and R¹⁰ are each independently,

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- . H
- straight-chain or branched C₁- to C₂₀-alkyl,
- straight-chain or branched C₃- to C₂₀-alkenyl,
- straight-chain or branched C₁- to C₂₀-hydroxyalkyl, where the hydroxyl group is bonded to a primary or secondary carbon atom and alkyl chains of said hydroalkyl moieties optionally being interrupted by oxygen, or
- C_{3} to C_{10} -cycloalkyl groups or C_{3} to C_{12} -cycloalkenyl groups, having rings optionally bridged by -(CH₂)_n- groups, where n = 1 to 3, and

R⁸ and R⁹ are each independently

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- Η,
- OR¹¹,
- straight-chain or branched C₁- to C₂₀-alkyl,
- straight-chain or branched C₃- to C₂₀-alkenyl,
- straight-chain or branched C₁- to C₂₀-hydroxyalkyl, where the hydroxyl group is bonded to a primary or secondary carbon atom and alkyl chains of said hydroxyalkyl moieties optionally being interrupted by oxygen, or
- C_{3} to C_{10} -cycloalkyl or C_{3} to C_{12} -cycloalkenyl, having rings optionally bridged by - $(CH_{2})_{n}$ groups, where n = 1 to 3.

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